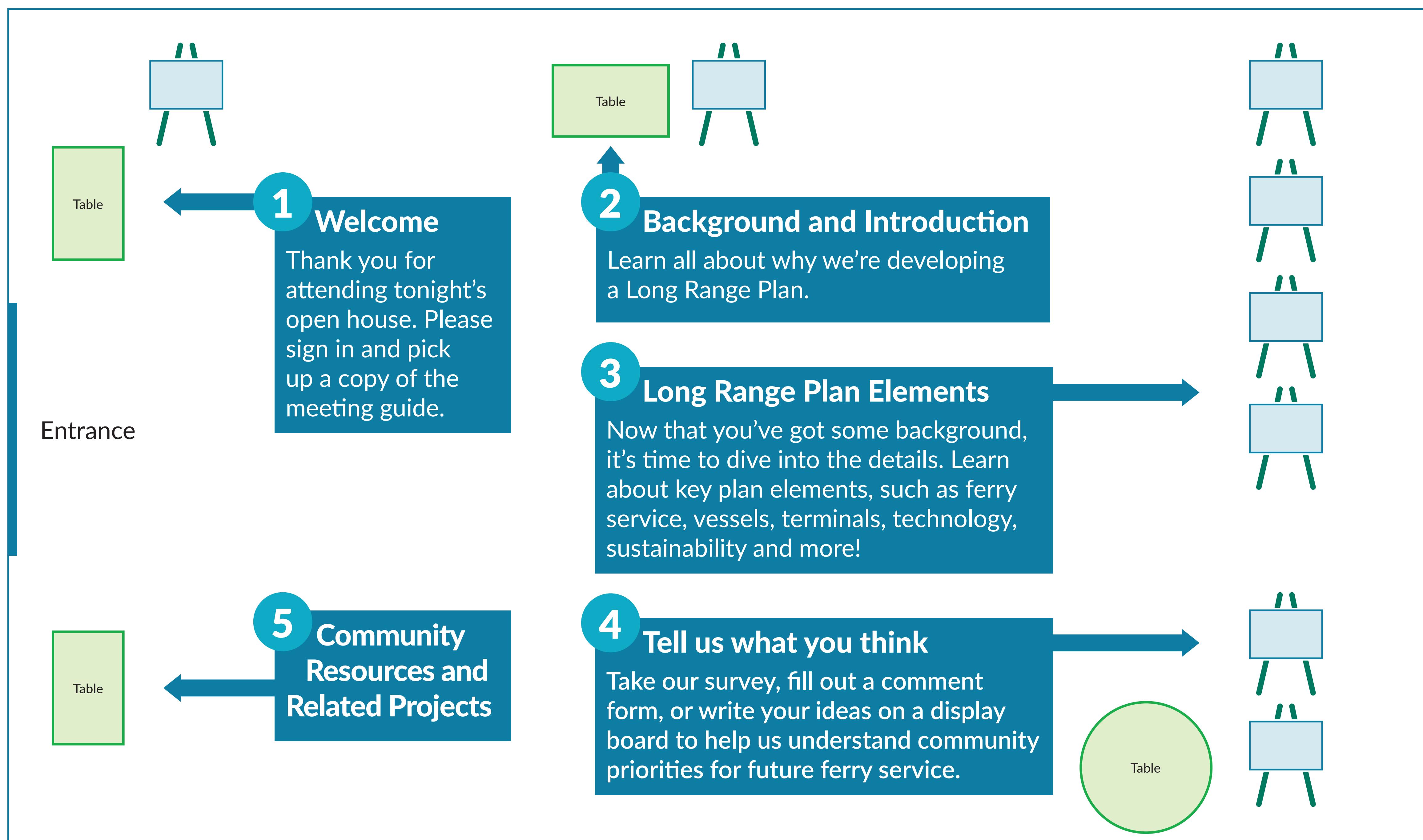


# Welcome

The purpose of tonight's open house is to:

- Learn about Washington State Ferries' 2040 Long Range Plan
- Meet the project team and ask questions
- Share your ideas and help WSF identify priorities and considerations that should be included in the Long Range Plan

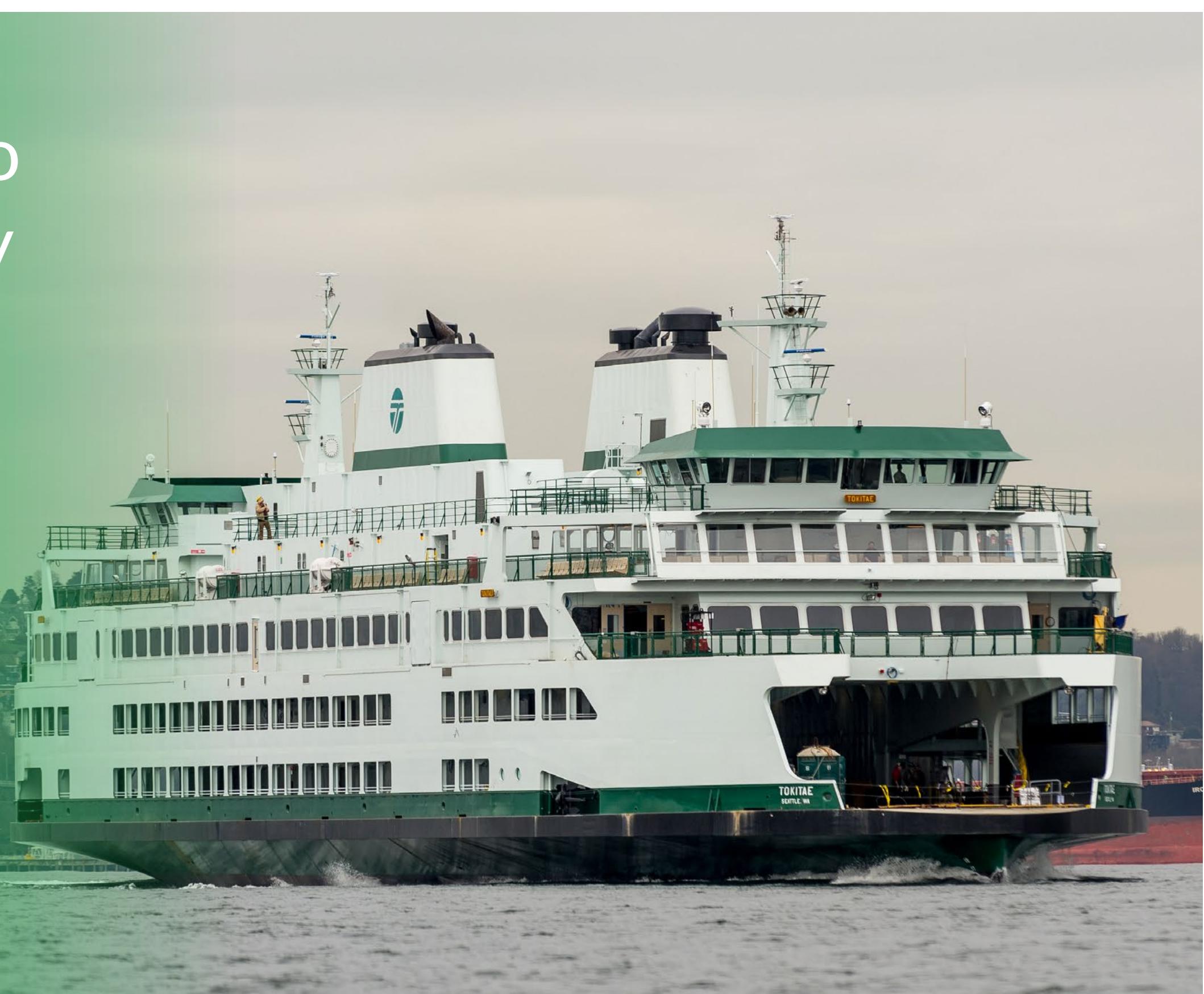


# What is the Long Range Plan?

WSF is developing a Long Range Plan to better understand and plan for the ferry system's changing needs through 2040.

The plan will guide future service and investments in vessels and terminals.

In addition to community input, several legislative directives and policies will help shape the Long Range Plan.



## 2017/2019 Transportation Budget

- Review the changing needs of ferry system users and funding opportunities and challenges
- Evaluate strategies to help spread peak ridership
- Identify operational changes to reduce costs
- Address the seismic vulnerability and emergency preparedness of the system

## Long Range Plan Objective

Provide information about the needs of ferry customers, establish operational and pricing strategies to meet those needs, and identify vessel and terminal operations and capital requirements.

## 2007 Legislative Directive (ESHB 2358)

- Include service objectives for routes
- Forecast demand
- Develop investment strategies that consider regional and statewide needs
- Support local use plans, and assure that ferry services are fully integrated with other transportation services
- Provide for the preservation of capital assets based on lowest life-cycle cost methods; be consistent with the regional transportation plans
- Be developed in conjunction with the Ferry Advisory Committees

## 2040 Long Range Plan

## WSDOT Plans

- Washington Transportation Plan
- Human Services Transportation Plan
- Public Transportation Plan
- Climate Resiliency Plan

## WSDOT Strategic Goals

- Inclusion
- Practical Solutions
- Workforce Development

## Executive Order 18-01

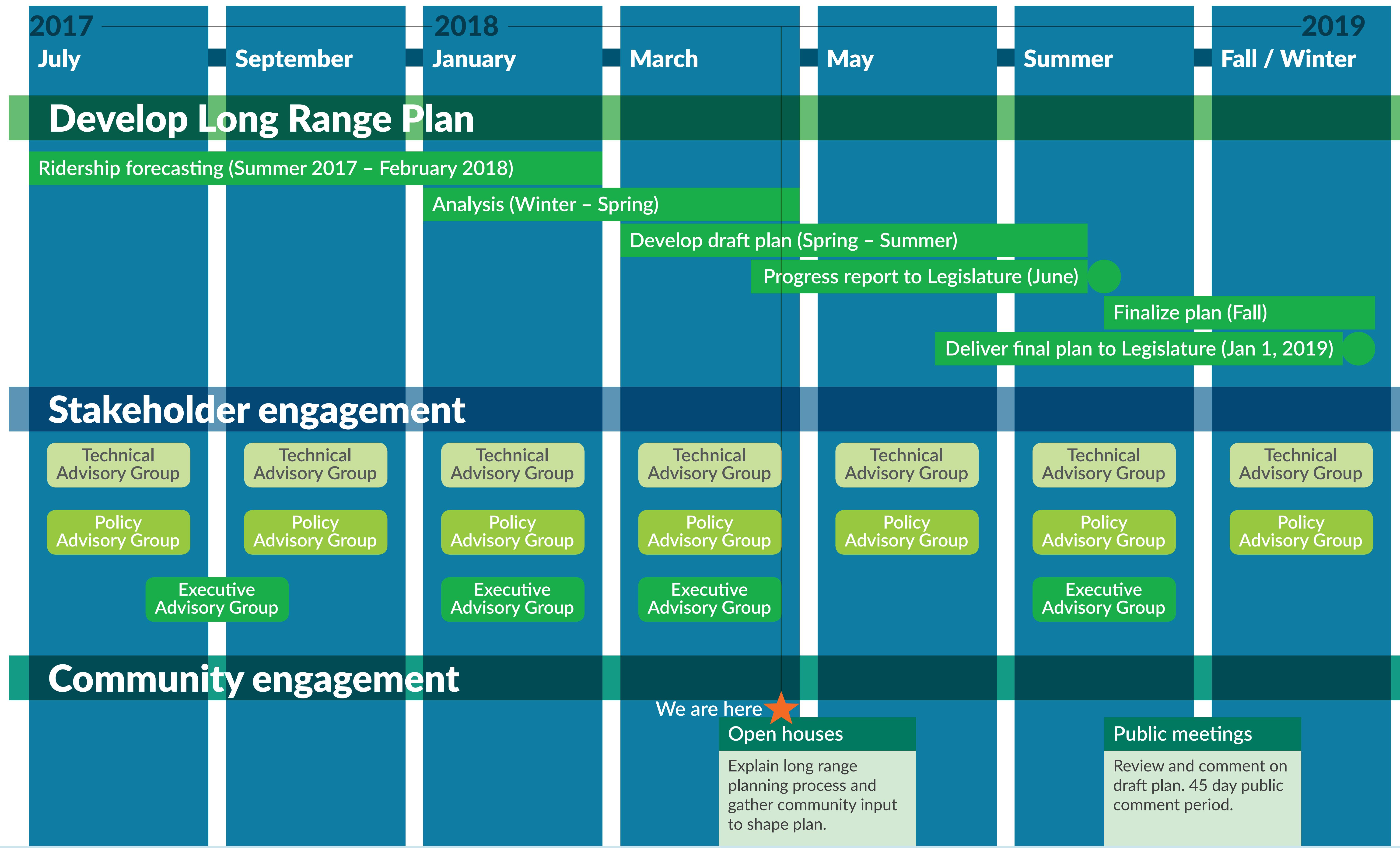
Directs WSF to begin the transition to a zero-carbon-emission ferry fleet, including accelerated adoption of both ferry electrification and operational improvements to conserve energy and cut fuel use.

## 2013 Origin-Destination Survey

- Includes where ferry riders travel before and after they take a ferry

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# Timeline



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# What will the ferry system look like in 2040?

Systemwide ridership is projected to increase 30 percent by 2040. The Long Range Plan will help WSF determine how to accommodate future growth. Ridership forecasts are based on rider survey results and local and regional forecast data from the Puget Sound Regional Council and local jurisdictions.

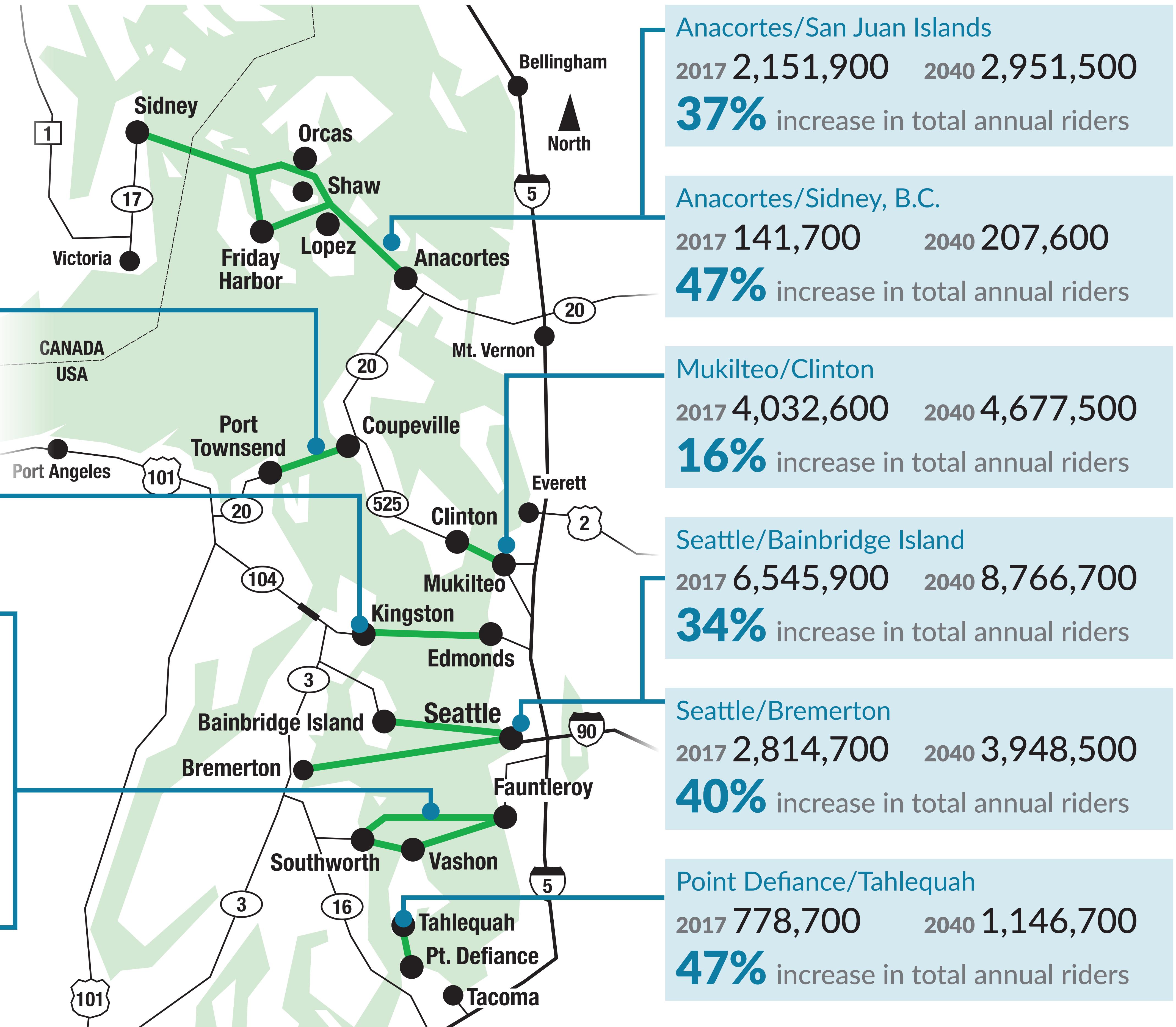
**Port Townsend/Coupeville**  
2017 796,400    2040 1,220,000  
**53%** increase in total annual riders

**Edmonds/Kingston**  
2017 3,982,900    2040 5,874,400  
**47%** increase in total annual riders

**Southworth/Vashon**  
2017 198,800    2040 311,900  
**57%** increase in total annual riders

**Vashon/Fauntleroy**  
2017 1,985,200    2040 2,353,600  
**19%** increase in total annual riders

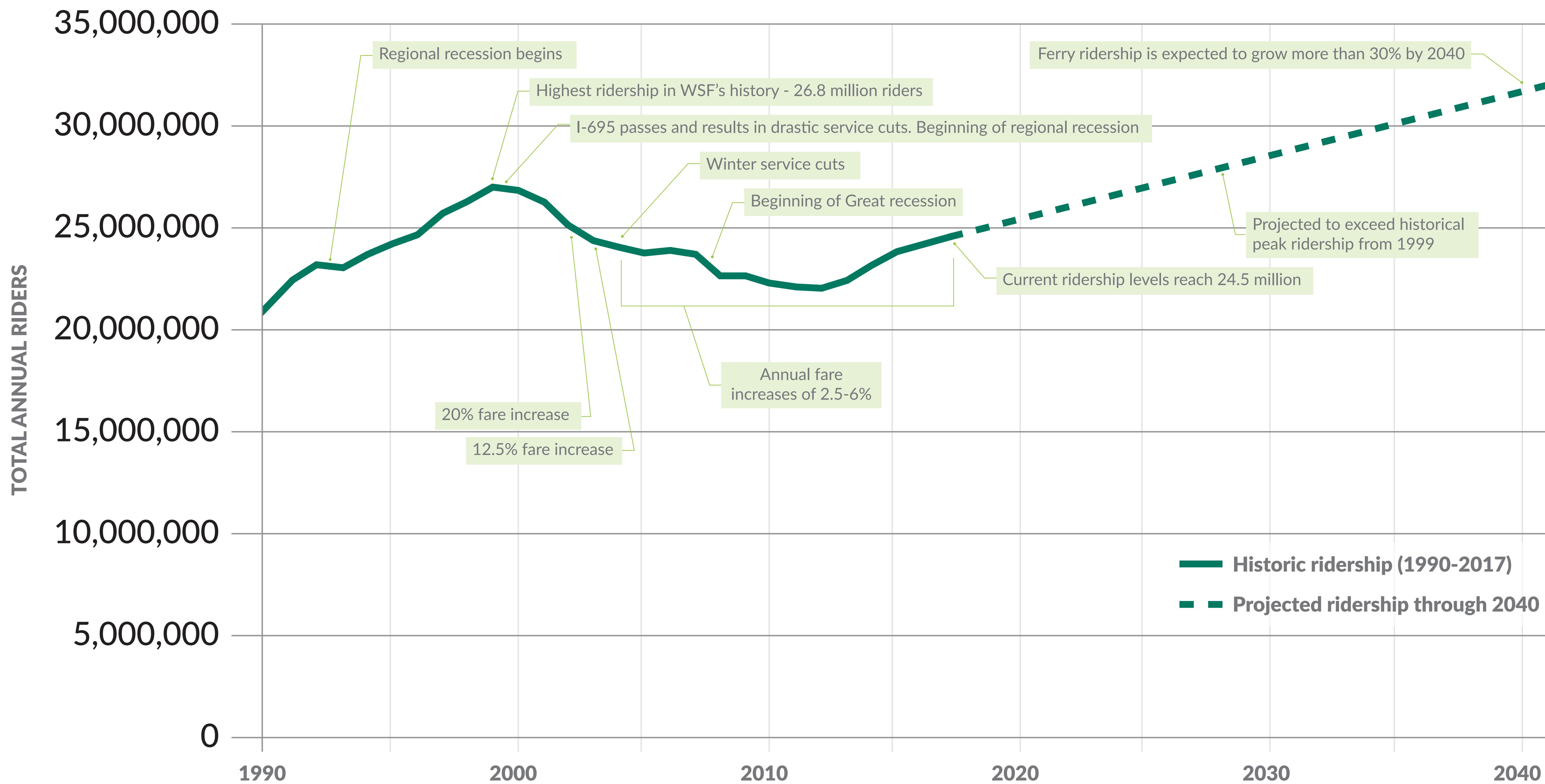
**Fauntleroy/Southworth**  
2017 912,800    2040 1,252,700  
**37%** increase in total annual riders



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# Historic and anticipated ridership

Historically, ridership is impacted by fare increases and economic conditions. Projected ridership forecasts do not reflect variations between now and 2040.



# What will the 2040 Long Range Plan include?

## Key themes:



## Plan elements:

- Ferry fleet**  
A strategy to maintain and replace ferries.
- Terminals**  
Actions to preserve and upgrade terminals.
- Demand management strategies**  
Strategies to spread peak ridership and improve operational efficiency.
- Route analysis and service scenarios**  
A profile of the unique needs and characteristics of each route.
- Workforce assessment**  
Opportunities to recruit and retain the workforce needed to keep the system running.
- Capital investments and funding**  
Recommendations to guide future investments and outline strategies for funding.

The final plan will outline strategies to implement service changes and investments to support resilient, efficient and sustainable ferry service through 2040.

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# Fleet maintenance and replacement

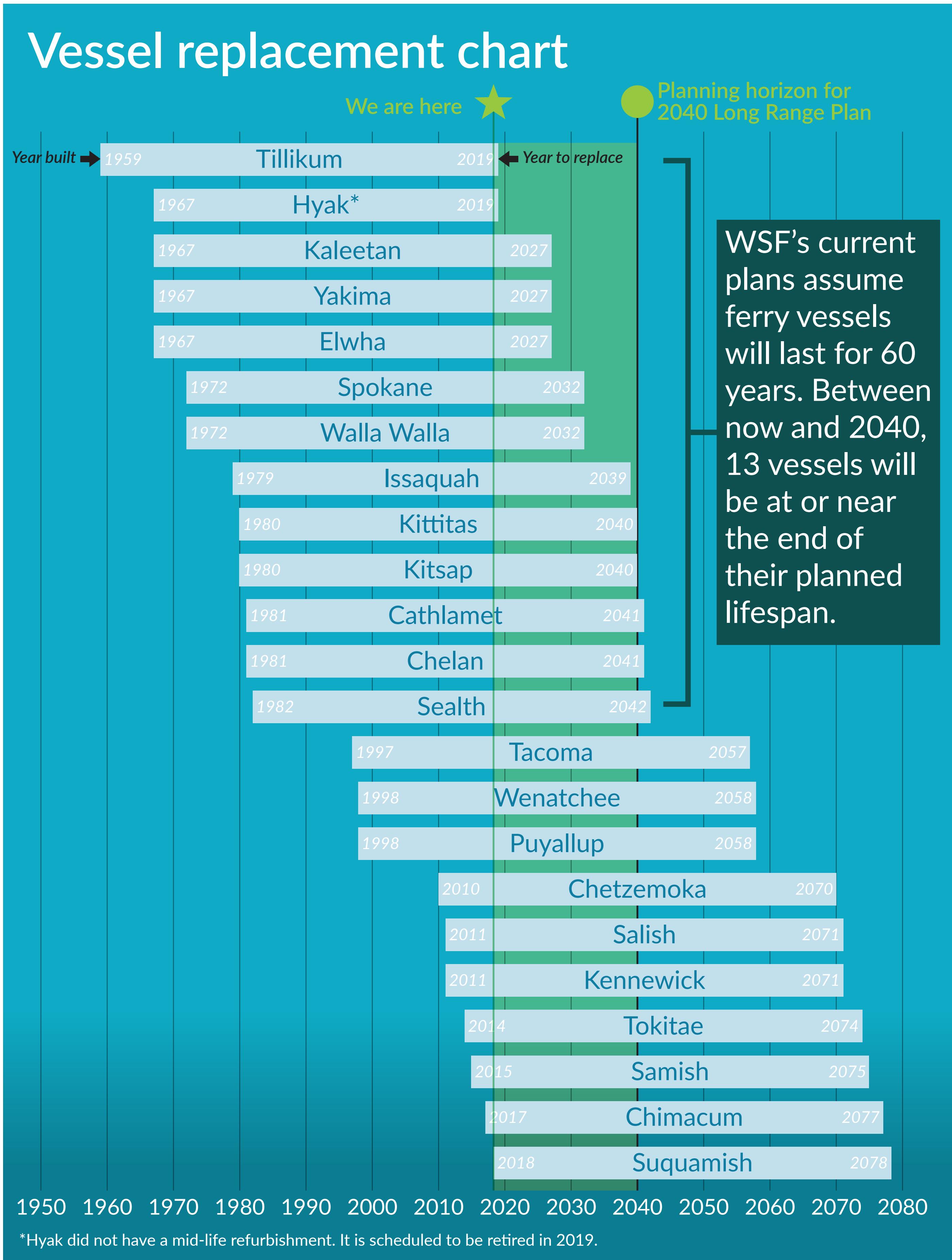
Our ferries operate more than 20 hours each day, 365 days a year. This puts stress on our fleet, which is complicated by other factors, including aging ferries, limited spare ferries, and the number of slips at each terminal. WSF has also been directed to reduce carbon emissions.

The Long Range Plan will outline a strategy to maintain and replace vessels, by considering:

- The state of the current fleet, with an emphasis on maintenance needs
- Opportunities for electric/hybrid ferries
- The number, type and size of new vessels

## Key considerations and challenges

- New technologies could improve efficiency and reduce the cost of operating ferries.
- Each route has specific needs, and not all ferries can serve all routes.
- Local shipyards have limited capacity to build and maintain the number of ferries WSF needs.
- The current assumption that a ferry will last 60 years needs to be re-evaluated.



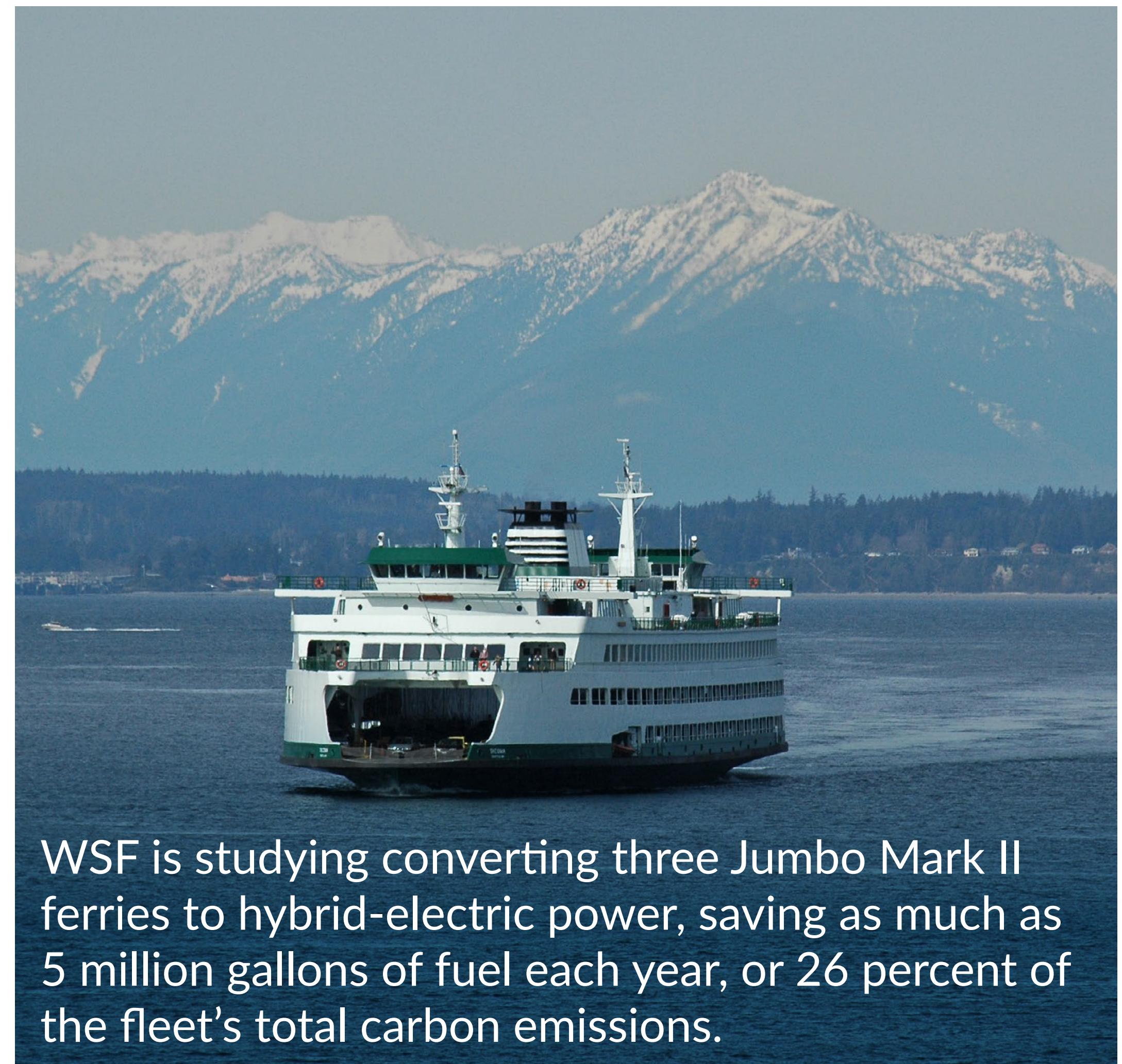
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# Greening the fleet

Executive Order 18-01 directs WSF to begin the transition to a zero-carbon-emission ferry fleet, including the accelerated adoption of both ferry electrification and operational improvements that will conserve energy and cut fuel use. Executive Order 18-02 requires WSF to explore strategies to quiet ferries to protect the struggling orca population.

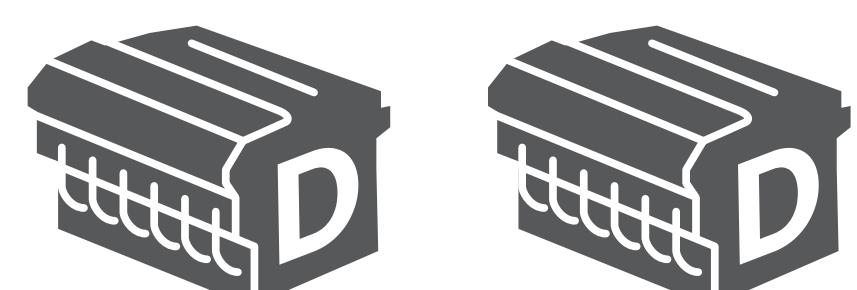
## Key considerations and challenges

- WSDOT is behind in meeting state-mandated greenhouse gas reductions.
- WSF must weigh opportunities to build new hybrid ferries and convert existing vessels to hybrid-electric power.
- The Pacific Northwest has plentiful hydroelectric power, which makes it an attractive option for powering ferries.
- Space and infrastructure at terminals for charging, and utility connections to terminals.



WSF is studying converting three Jumbo Mark II ferries to hybrid-electric power, saving as much as 5 million gallons of fuel each year, or 26 percent of the fleet's total carbon emissions.

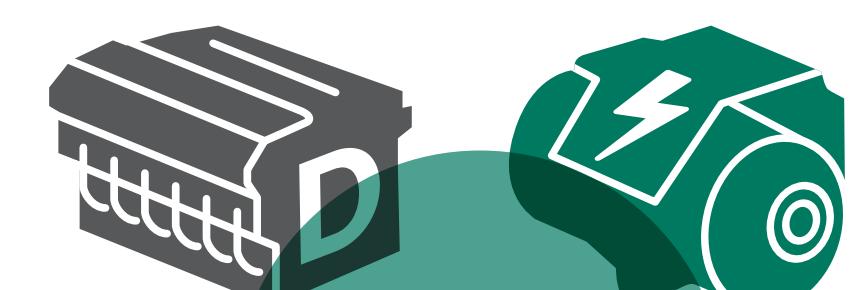
## Alternative propulsion systems



Normal



Spinning Reserve



Hybrid



All-Electric

Diesel engine

Lithium ion battery

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# Terminals

Our system includes unique terminal configurations and aging infrastructure such as creosote-treated timber piling.  
The plan will:

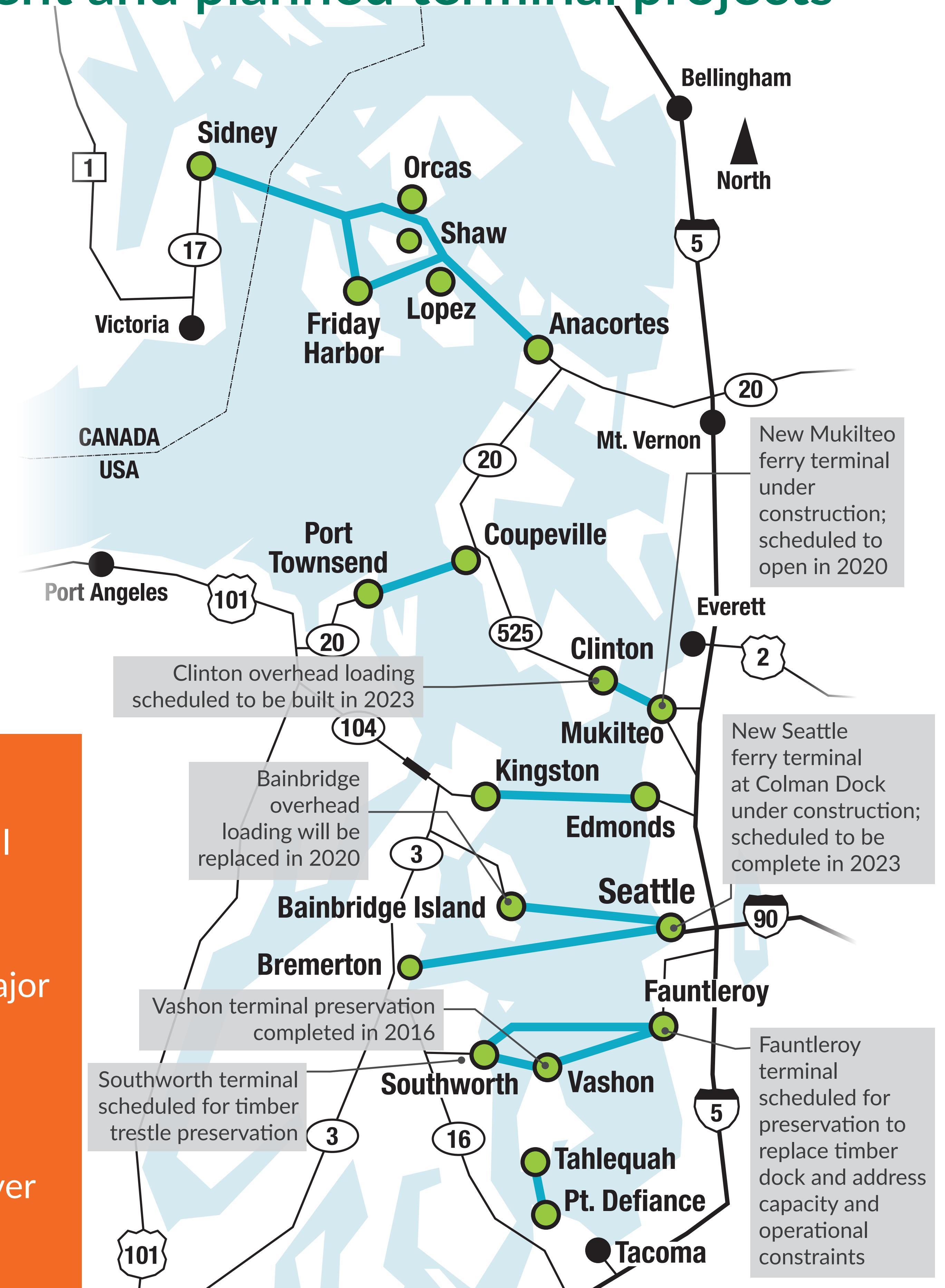
- Look at ways to improve access to terminals and integrate with local roads and transit.
- Consider opportunities to bring terminals up to current seismic standards to continue safe and reliable service.
- Outline steps to improve resiliency and maintain terminal operations during an emergency event.
- Assess the impacts of climate change, including severe weather and rising sea levels.



## Key considerations and challenges

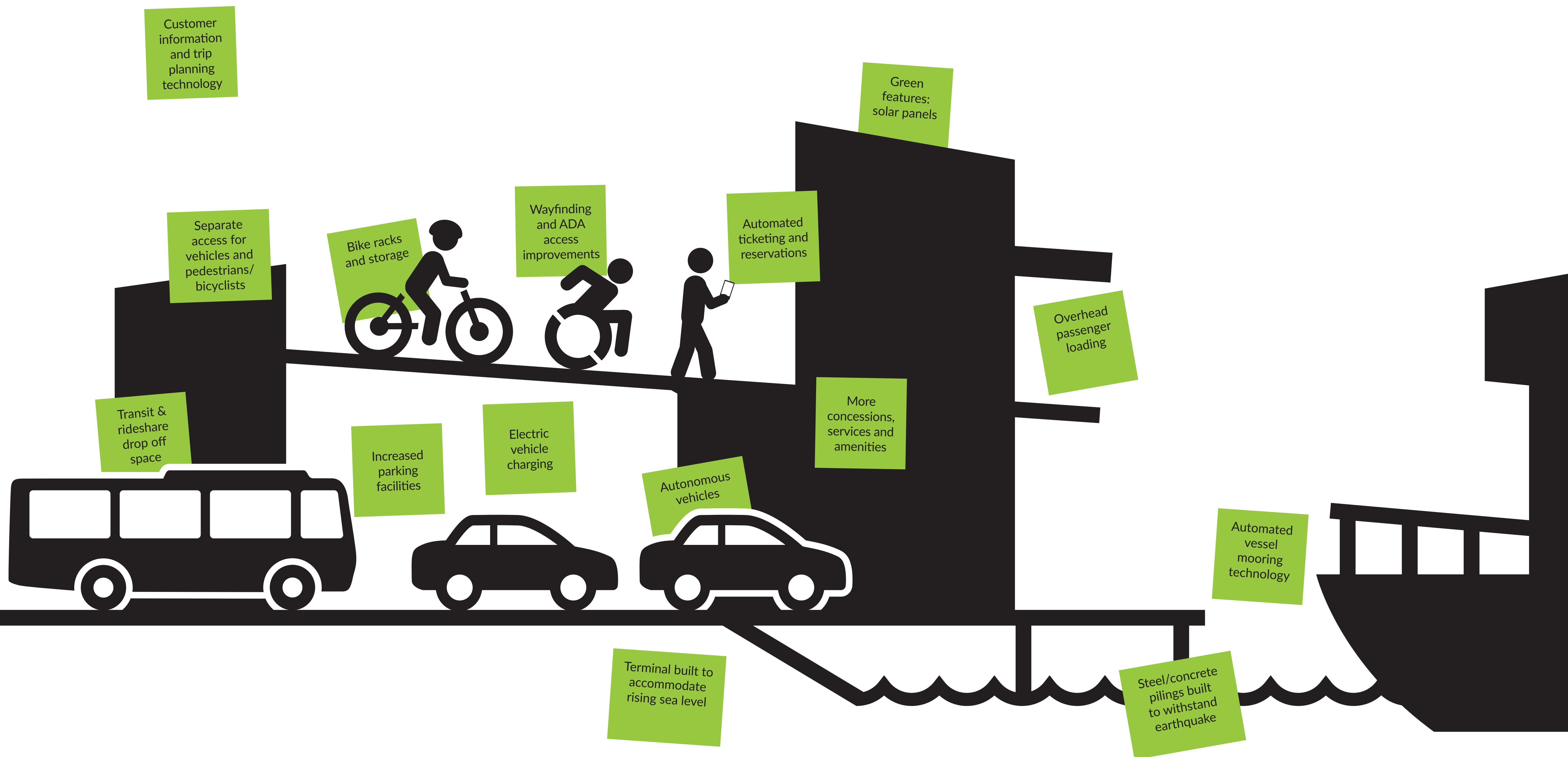
- Asset management model and seismic assessment will help determine preservation priorities and needs.
- Travel patterns, ridership forecasts, and operational constraints will determine where we need to make major improvements to our terminals.
- Aging timber pilings at many terminals make them vulnerable to earthquakes and other seismic events.
- The challenges of building within the shoreline and over water make terminal projects costly and complicated.

## Current and planned terminal projects



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# Future considerations for terminals



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# Ferry service

Potential strategies to accommodate growth and help spread ridership to less busy times



## Key considerations and challenges

- Coordination with other agencies is necessary to provide seamless door-to-door trips.
- Changes to ferry service are constrained by technology, infrastructure, and funding.

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# Measuring performance

## The plan will:

- Evaluate WSF's current standards for increasing service levels and adding capacity.
- Consider existing performance metrics to make sure we're measuring the right things. Current performance metrics include:
  - Percentage of projects completed on time
  - Safety measures such as the number of passenger injuries
  - Operating costs
  - Service reliability
  - Customer satisfaction
  - On-time performance



### Key considerations and challenges

- Balancing day-to-day customer needs and peak season travel.
- Performance metrics are established by the legislature.

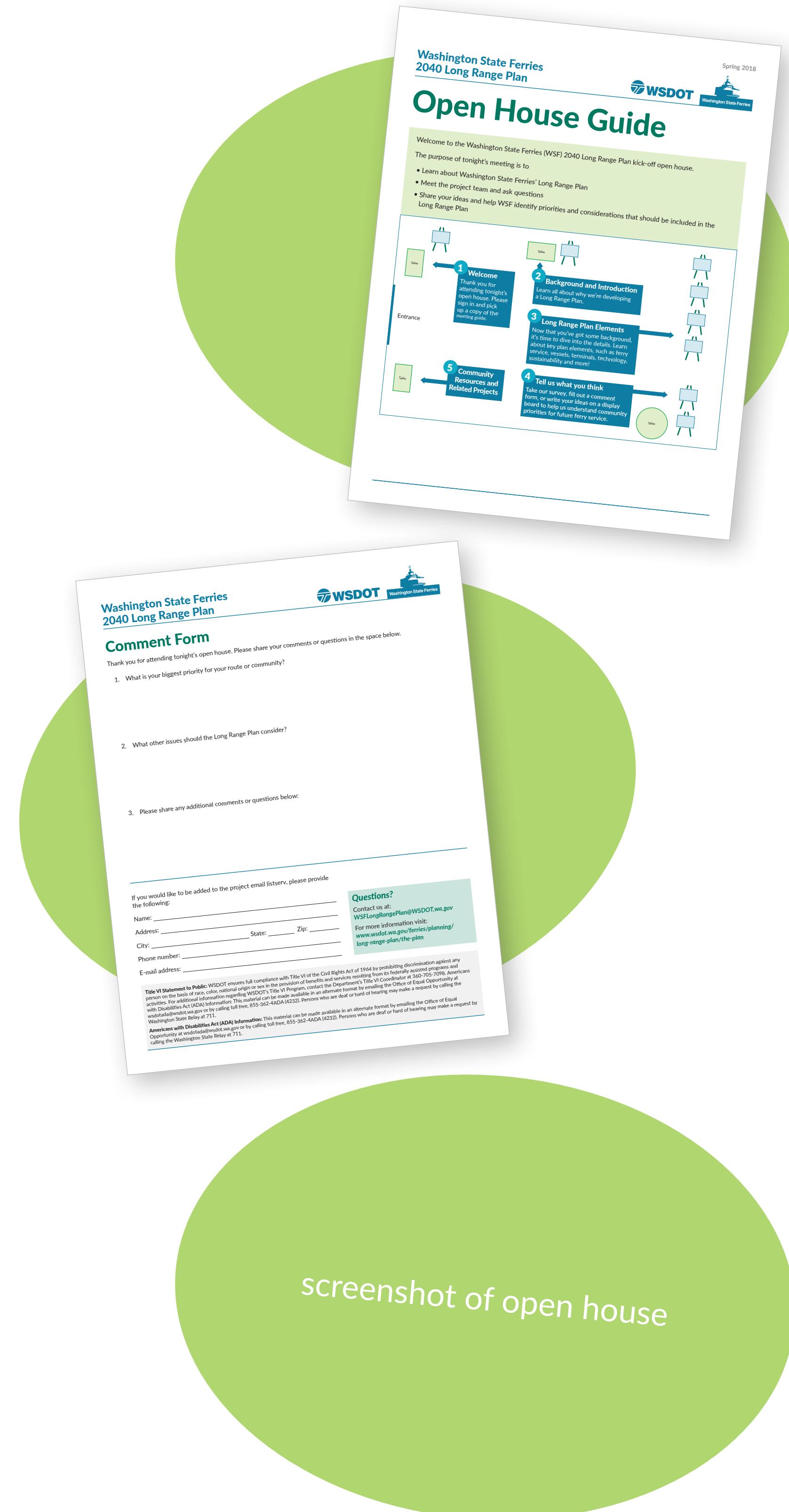
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# We want to hear from you!

We need your help to identify issues and priorities that should be addressed in the Long Range Plan.

WSF will consider input as we develop a Draft Plan. The Draft Plan will be available for review and comment in Fall 2018.

**There are multiple ways to provide input:**



Take the survey in your meeting guide

Submit a comment form

Participate in the online open house by May 24

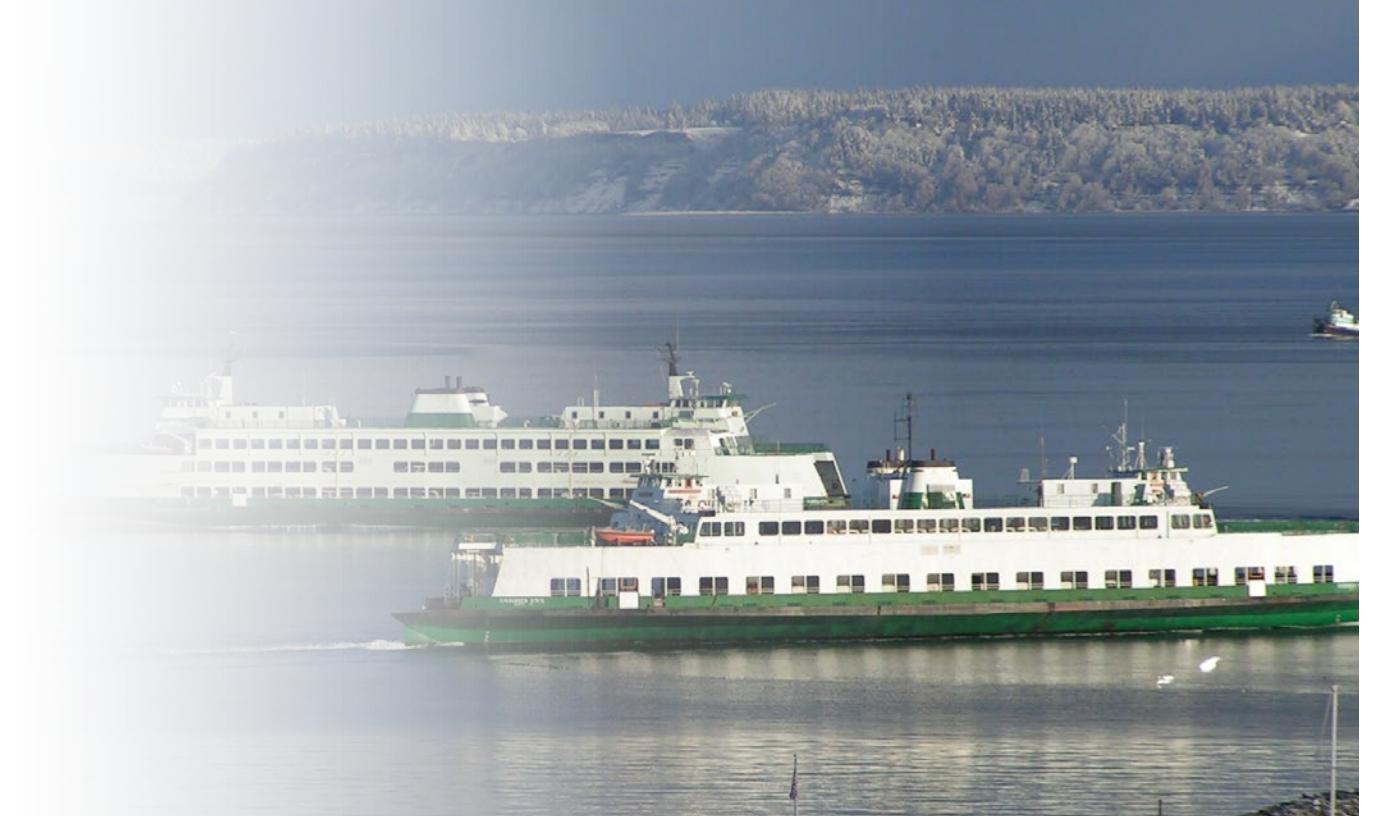
# We want to hear from you!

Post-it  
note  
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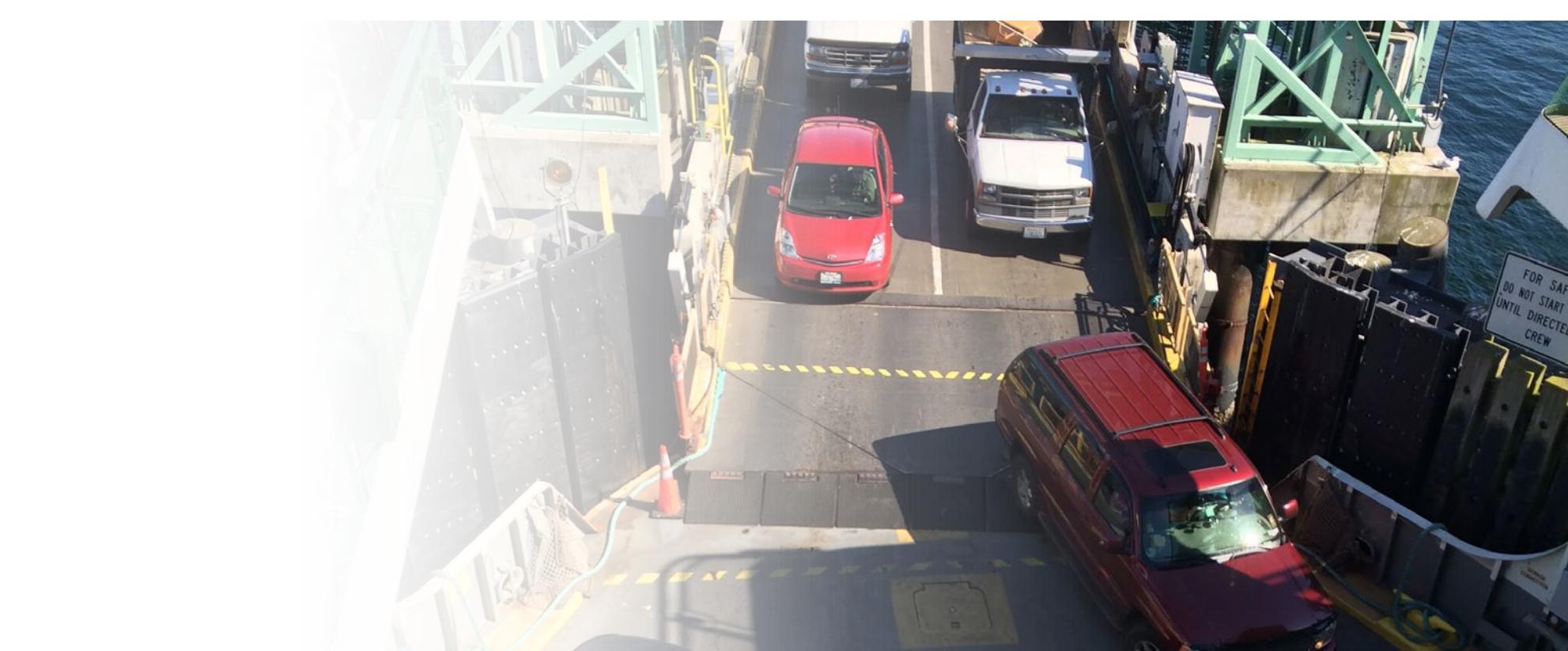
## *Share your ideas!*

### Vessels and terminals

What are the top things we should consider when looking at the ferry fleet over the next 20 years?



What are your key interests and concerns for the terminal(s) in your community?



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**Washington State Ferries  
2040 Long Range Plan**



# We want to hear from you!

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note  
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## *Share your ideas!*

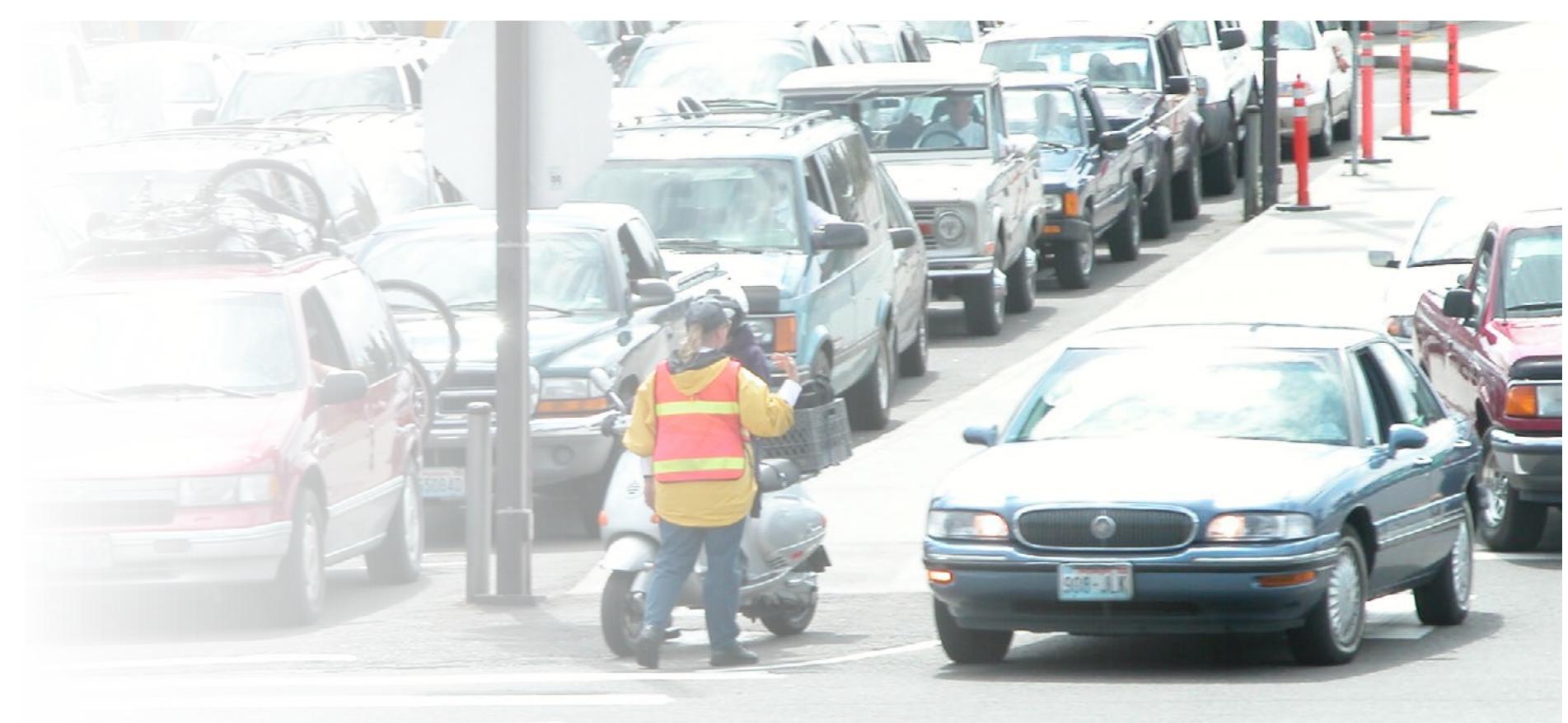
### Ferry service

What are your biggest priorities as WSF plans to accommodate growing ridership?



### Measuring performance

What factors should WSF consider to measure performance and make decisions about adding service or capacity?



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Washington State Ferries  
2040 Long Range Plan

